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Appln. No.: 09/550,962

MAT-7947US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: 09/550,962
Applicant: Akihiro Yamashita
Filed: April 17, 2000
Title: DISPLAY DEVICE AND DRIVING METHOD THEREOF
TC/A.U.: 2674
Examiner: A.I. Abdulsalam
Confirmation No.: 1642
Docket No.: MAT-7947US

DECLARATION OF TAICHI SHINO
UNDER 37 C.F.R. § 1.132

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Taichi Shino, hereby declare that:

1. I am an inventor of subject matter described in U.S. Patent No. 6,195,075 to Shino et al. entitled PLASMA DISPLAY DEVICE AND METHOD FOR DRIVING THE SAME (herein the "Shino patent"), on which a rejection of the above identified patent application is based.
2. My educational background includes: Master in Electron Physics, 1970, completed Doctoral Course in Electron Physics of Osaka City University.
3. My achievements include: Developing mass spectrometers, picture tubes for broadcasting, and plasma display panels.
4. From 1970 to 2000, I was employed by Matsushita Electric Industrial Co., Ltd., where my titles included: Manager and Senior Staff Engineer in R&D division.

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5. Claim 1 of the above identified patent application was rejected based on teachings found in the Shino patent, of which I am an inventor. Claim 1 recites "setting a discharge time for discharging the accumulated charge of [] light emitting elements before light emission of said light emitting elements." The Shino patent does not disclose, teach, or suggest this recited feature.

Referring to the abstract, the examiner states that the Shino patent teaches "induction of main discharge between anodes and cathodes that is done through the discharging of the writing charge stored in the dielectric layer." The writing charge referred to in the abstract is discharged to accumulate a positive charge on the face of a dielectric layer. A DC negative sustaining voltage is then independently applied to a cathode to cause the accumulated charge to discharge toward the cathode and induce sustained discharge current flow from the anode to the cathode, thereby causing illumination of the light emitting element. See column 11, line 51 through column 12, line 56. The discharge of the accumulated charge induces the sustained discharge, however, a discharge time is not set for discharging the accumulated charge of the light emitting elements before light emission of the light emitting elements.

The examiner refers to two primary areas of the specification in reaching the conclusion that the Shino patent teaches setting a discharge time for discharging accumulated charge of light emitting elements before light emission of the light emitting elements.

First, referring to FIG. 6, the examiner states that "Shino establishes the relation between the discharge current I_d and luminance B as plotted by the curve B." The plotted discharge current I_d , however, is not a discharge current for discharging the charge accumulated at the light emitting elements before light emission of the light emitting elements. Rather, the discharge current I_d is a sustained discharge current that causes light emission from the light emitting elements. See column 10, lines 41-64 and column 12, lines 28-47 of the Shino patent. Further, the sustained discharge current I_d results from the application of voltage supplied from a power source rather than discharge of accumulated charge. See column 12, lines 48-49 of the Shino patent, "[w]hen application of voltage to all the cathode buses $K_1 - - - K_N$ is stopped, the sustained discharge ceases" (underline added). Since the discharge current I_d in the Shino patent occurs during the emission of light from the light emitting elements and is due to voltage supplied by a power source rather than the discharge of accumulated charge, FIG. 6 of the Shino patent does not disclose, teach, or suggest setting a discharge time for discharging the

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accumulated charge of light emitting elements before light emission of the light emitting elements.

Second, referring to FIGs. 23(a) and 23(b), the examiner states that "Shino teaches the discharge time of different values with respect scanning and sustaining discharge current values." As explained above, the discharge current referred to here, and throughout the specification of the Shino patent, refers to a discharge current for illumination of the light emitting elements resulting from a voltage supplied by a power source rather than the discharge of accumulated charge of light emitting elements before light emission of the light emitting elements. Thus, FIGs. 23(a) and 23(b) of Shino patent do not disclose, teach, or suggest setting a discharge time for discharging the accumulated charge of light emitting elements before light emission of the light emitting elements. Further, nowhere in the Shino patent is this feature disclosed, taught, or suggested.

Accordingly, for the reasons discussed above, the Shino patent does not disclose, teach, or suggest setting the discharge time for discharging the accumulated charge of light emitting elements before light emission of the light emitting elements as set forth in claim 1.

6. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issued thereon.

Dated: 10/30/03
Taichi Shino